

Craighead Environmental Research Institute

Monthly Progress Report: December, 2007

for the Montana Department of Transportation and Western
Transportation Institute

Bozeman Pass Wildlife Monitoring

MSU banner number 426899

1 December 2007 – 31 December 2007

Task 1: Road Kill Surveys during December 2007

Road kill surveys were conducted between Bozeman and Jackson Creek. Surveys were conducted on both sides of I-90 from Bozeman to Jackson Creek and back for a total of 22 miles round trip and an estimated 1 hour of labor per survey. Thirteen (13) road-kill surveys were driven during December of 2007. Two (2) of those recorded no new road-kill. This equals 286 miles driven in December for this subcontract. Totals of animals killed between Bozeman and Livingston were:

Bozeman Pass Roadkill Totals	December
Species	Number
Badger	0
Beaver	0
Bobcat	1
Bird Spp.	0
Black Bear	0
Cowbird	0
Coyote	0
Deer species	0
Dog	0
Domestic cat	0
Elk	0
Great Horned Owl	1
Hungarian (Gray) Partridge	1
Magpie	0
Mallard	0
Marmot	0
Meadowlark	0
Mink	0
Moose	0

Mule Deer	2
Pigeon	1
Porcupine	0
Rabbit	0
Raccoon	1
Red Fox	0
Snowshoe Hare	1
Skunk	0
Small mammal spp.	0
Weasel	0
White Tail Deer	8

Task 2: Track bed monitoring at the MRL Bridge in December 2007

Because of snow conditions only one opportunistic track bed session was completed in December. There were twenty-nine (29) sets of deer tracks that crossed the track bed in a 3-day period from 12-24 to 12-27. In addition three (3) other deer tracks crossed underneath the Interstate but to the west of the track bed along the service road where no track bed is possible.

Task 3: Photo monitoring at fence ends through December 2007

One deer was recorded by the SE fence-end camera (Camera 7) in December. One deer and several rabbits were recorded by the NE fence-end camera (Camera 6). Batteries for all remote cameras were operational.

Task 4: Infrared counter monitoring at jump-outs through December 2007

The Trailmaster sensors are often triggered by false events and adjustment of counter sensitivity settings has been unable to make them reliable. They were not checked during December.

Task 5: Track bed monitoring at fence ends, jump-outs through December 2007

Because of snow and freezing conditions, track beds are not reliable during winter but can be opportunistically checked when snow conditions permit. One set of coyote (or possibly a dog) tracks was recorded at the NW jump-out during December. The canid was inside the wildlife fence and leapt from the top of the jump-out. Snow tracks indicate that the animal's body hit fairly hard. It landed approximately 10 feet away from the base of the jump-out wall.

Task 6: Photo monitoring of culverts December 2007

The culvert cameras were not downloaded in December. Batteries for all remote cameras were replaced at the end of October and should last through the winter.

Task 7: Opportunistic snow tracking at track bed, fence ends, jump-outs, and along the Interstate in December 2007.

Snow tracks indicated that a few deer can pass underneath the Interstate without crossing the track bed although the majority (29/32) pass across the track bed. Tracks also confirm that some animals cross the Interstate at the fence ends and a few travel inside the fence along the shoulder at least for a short distance before exiting at the fence-ends. No deer tracks exited at jump-outs and no deer were killed inside the fenced area. Snow tracks indicate that the majority of deer are deterred by the cattle guards at the east end of the fence, but at least one deer was able to cross the cattle guard and go up the embankment to the highway.

Task 8: Data Management & Reporting in December 2007

Data entry and summary required two hours during December.